

US EPA ARCHIVE DOCUMENT

EEE BRANCH REVIEW

DATE: IN _____ OUT _____ IN _____ OUT _____ IN 4/5/78 OUT 4/7/78
FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FILE OR (REG. NO.) _____ 100-LOT _____

PETITION OR EXP. PERMIT NO. _____

DATE DIV. RECEIVED _____ 3/1/78 _____

DATE OF SUBMISSION _____ 2/28/78 _____

DATE SUBMISSION ACCEPTED _____

TYPE PRODUCTS(S): I, D, (H,) F, N, R, S Herbicide

DATA ACCESSION NO(S). _____ 232943 - 232948 _____

PRODUCT MGR. NO. _____ 24 - Henry Jacoby _____

PRODUCT NAME(S) _____ Dual 8E _____

COMPANY NAME _____ Ciba-Geigy _____

SUBMISSION PURPOSE New product registration for use on corn excluding popcorn. Data also submitted in support of future use on soybeans.

CHEMICAL & FORMULATION metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) 86.4%
(8#ai/gallon)

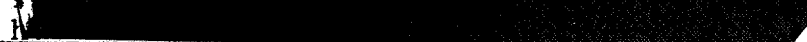
200.0 Introduction:

200.1 Uses:

Registration of Dual 8E for use on corn grown for grain excluding popcorn. Data also submitted in support of future Dual 8E on soybeans use.

200.2 Background Information:

Dual 6E is presently registered for use on corn grown for grain excluding popcorn (Reg. No.: 100-583). Ciba-Geigy is now requesting registration of Dual 8E based on bridging data showing comparable biological activity at comparable #ai/A between Dual 6E and Dual 8E. The only differences between the two formulations are: (1) the Dual 8E has a higher percentage ~~(~~20%~~)~~ of technical metolachlor than Dual 6E. (2) 8E has a higher percentage

 Biological equivalency of Dual 6E and Dual 8E was noted by EEEB in previous experimental use permit reviews on corn and sorghum submitted 11/4/77. The proposed Dual 8E label on corn is identical to the Dual 6E corn label. Proposed rates are identical in #ai/A.

201.0 Data Summary

201.1.1 Brief Description of Data Submitted

Bridging efficacy, crop injury and yield data were submitted comparing Dual 6E performance with Dual 8E performance in corn and soybeans. PPI and pre-emergence Dual 8E and Dual 6E treatments were compared in the field. Comparable biological activity was noted from direct comparisons of Dual 8E and Dual 6E applied in fluid fertilizer carriers on corn and soybeans. The following liquid fertilizers were used: 20-0-0, 32-0-0, 7-21-7, 28-0-0. Further, Dual 8E applied PPI or preemergence in water was found biologically comparable to Dual 8E applied PPI or preemergence in fluid fertilizer. Compatibility data were referenced and submitted in support of Dual 8E combinations with fluid fertilizers and other herbicides.

201.1.2 Data Summaries

Refer to EEEB files for data summaries.

Not a deletion.
This item is
crossed out
on the original.

Inert ingredient
information
deleted

202.0 Conclusions:

202.1 Claims Supported by the Data Submitted and Referenced:

- a. Efficacy, crop injury and yield bridging data submitted will support comparable biological performance between Dual 6E and Dual 8E applied PPI or preemergence at comparable #ai/A on corn and soybeans.
- b. Tank mix compatibility data referenced and submitted will support the following combinations:

corn (Maximum recommended tank mix rates in minimum recommended spray volume)
 1. Dual 8E plus fluid fertilizers (32-0-0, 10-34-0, 7-21-7, 10-10-10)
 2. Dual 8E plus AAtrex 80W, 4L, 4LC and Nine-0
 3. Dual 8E plus AAtrex 80W, 4L, 4LC and Nine-0 plus fluid fertilizers (32-0-0, 10-34-0, 7-21-7, 10-10-10)
 4. Dual 8E plus Sencor or Lexone 50W or 4L
 5. Dual 8E plus Banvel 4S plus fluid fertilizers (28-0-0, 10-10-10)
 6. Dual 8E plus Bladex
 7. Dual 8E ^(Bladex plus) plus fluid fertilizers (10-34-0, 7-21-7, 10-10-10). Dual 8E plus Bladex plus 28-0-0 were not compatible.

soybeans (Maximum recommended tank mix rate in minimum recommended spray volume)

1. Dual 8E plus Sencor or Lexone (50W or ⁸ 4L)

All of the above mentioned tank mixes were compatible with agitation.

203.0 Label Comments to be Resolved Prior to Registration:

1. On the proposed Dual 8E label on page 7, last paragraph; the last sentence must be revised to include the following . . .the tank mixture "after bed formation. Preemergence: Apply the tank mixture" to the soil surface. . .

204.0 Comment to Ciba-Geigy concerning data in our files
but not affecting this submission for Dual 8E
registration on corn:

- a. EEEB has no record of compatibility data for Dual 8E plus Lorox 50W in water for use on corn. These compatibility data are referenced by Ciba-Geigy as having been submitted 11/4/77 in support of their EUP for use of Dual 8E on corn.

*INFORMATION CAN BE FOUND IN ACCESSION # 222194
PAGE 79. THIS INFORMATION WAS REVIEWED BY
RIC PETRIE 4-27-78 AND FOUND ACCEPTABLE O.M.A.*

Comment:

The proposed use of Dual 8E on corn excluding popcorn will be acceptable after resolution of 203.0 above.

Richard C. Petrie *IF*
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EEEB